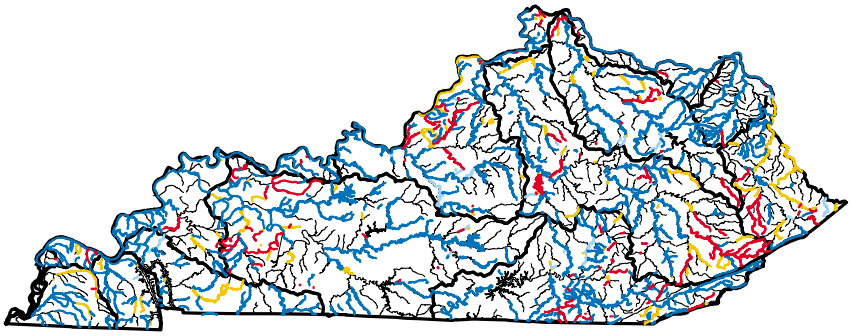
Kentucky



Fully Supporting
Threatened
Partially Supporting
Not Supporting
Not Assessed
Basin Boundaries
(USGS 6-Digit Hydrologic Unit)

This map depicts aquatic life use support status.

For a copy of the Kentucky 1998 305(b) report, contact:

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The report is also available on the Internet at: *http://water.nr.state.ky.us/305b/*

Surface Water Quality

About 75% of Kentucky's surveyed rivers (excluding the Ohio River) and 98% of surveyed lake acres have good water quality that fully supports aquatic life. Swimming use is fully supported in over 99% of the surveyed lake acres, but 75% of the river miles surveyed for bacteria do not fully support swimming. Fecal coliform bacteria, siltation, PCBs, and priority organics are the most common pollutants in Kentucky rivers. Frequently identified sources include urban runoff, resource extraction, sewage treatment facilities, land disposal of wastes, and agricultural activities. Nutrients, priority organics, and PCBs have the most widespread impacts on lakes. Potential sources include resource extraction, agriculture, and industrial discharges.

Declining trends in chloride concentrations and nutrients provide evidence of improving water quality in Kentucky's rivers and streams. Swimming advisories remain in effect on 86 miles of the North Fork Kentucky River, several streams in the upper Cumberland River basin, and the lower 5 miles of the Licking River and two tributary streams in northern Kentucky. Fish consumption advisories remain posted on three creeks for PCBs, the Ohio River for PCBs and chlordane, the Green River Lake because of PCB spills from a gas pipeline compressor station, and for five ponds on the West Kentucky Wildlife Management Area because of mercury contamination from unknown sources.

Ground Water Quality

Kentucky maintains an ambient ground water monitoring network of more than 100 sites. Underground storage tanks, septic tanks, spills, urban runoff, mining activities, agricultural activities, and landfills have been identified as the major sources of ground water contamination in Kentucky. Bacteria is the major pollutant in ground water. The state is concerned about the lack of ground water data, absence of ground water regulations, and the potential for ground water pollution in karst regions of the state.

Programs to Restore Water Quality

Construction grants, state revolving loan fund monies, and other funding programs have funded the construction of 26 wastewater projects that were completed in 1995-1997. These projects either replaced outdated or inadequate treatment facilities or provided centralized treatment for the first time. Kentucky requires toxicity testing on many point source discharges and permits for stormwater outfalls and combined sewer overflows. The nonpoint source program oversees projects addressing watershed demonstrations, education, training, enforcement, technical assistance, and evaluation of best management practices.

Programs to Assess Water Quality

Kentucky sampled 44 ambient monitoring stations characterizing about 1,432 stream miles during the reporting period. More than 60% of the state's least impacted streams have been monitored under the reference reach program. The state performed biological sampling at 17 of these stations in 1996 and 1997. Thirteen lakes were sampled to detect eutrophication trends. The state also performed 29 intensive studies to evaluate point source and nonpoint source impacts, establish baseline water quality measurements, and reevaluate water quality in several streams. Other data sources used by the state include discharge monitoring data, reports from the Kentucky Department of Fish and Wildlife Resources, and data from agencies such as the U.S. Geological Survey, the Army Corps of Engineers, the U.S. Forest Service, the Ohio River Valley Sanitation Commission, and Lexington and Louisville local governments.

Individual Use Support in Kentucky

Designated Use[a]	Total Miles Assessed	Percent Good (Fully Supporting)	Good (Threatened)	Fair (Partially Supporting)	Poor (Not Supporting)	Not Attainable
Rivers and Streams (Total Miles = 49,105)[b]						
	8,276	72	3	12	13	-
	1,659	92	0	<1	7	-
	2,510	21	3	20	55	-
Lakes (Total Acres = 228,385)						
	217,480	74	24	2	<1	-
	205,712	96	0	4	0	-
	217,732	100	0	<1	0	-

Summary of Use Support in Kentucky

	Total Acres Assessed	Percent Good (Fully Supporting)	Good (Threatened)	Impaired (For One or More Uses)
Wetlands (Total Acres = 975,593)				
	973,168	0	100	0

– Not reported in a quantifiable format or unknown.

[a] A subset of Kentucky's designated uses appear in this figure. Refer to the state's 305(b) report for a full description of the state's uses.

[b] Includes nonperennial streams that dry up and do not flow all year.

Note: Figures may not add to 100% due to rounding.